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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/734,609 Confirmation No. 9335  
Applicant : Smith et al.  
Filed : December 12, 2003  
TC/A.U. : 1648  
Examiner : Michael M. McGaw  
For : ALPHAVIRUS PARTICLES AND METHODS FOR PREPARATION  
Docket No. : 79-02  
Customer No.: 23713

Commissioner for Patents  
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October 14, 2004 Date	<i>Cathy Nelson</i> Cathy Nelson
EV 504060618 US Express Mail Tracking Number	

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants respectfully note that additional U. S. patent documents were made of record in an Information Disclosure Statement filed electronically on October 7, 2004.

The Examiner is respectfully requested to consider the references, copies enclosed, which may qualify as prior art. For the Examiner's convenience, the references are listed on the attached Patent and Trademark Office form PTO-1449.

This information is cited in a spirit of forthrightness and cooperation to enable the applicants to obtain that measure of protection for the invention to which there is entitlement. However, no representation is made that the listed art actually qualifies as prior art under the patent statute and the mere use of PTO-1449 is not an admission that all listed references are prior art. No representation is made that applicants know of the best art.

It is believed that this submission does not require the payment of a fee. If this is not correct, please charge any required fee to deposit account no. 07-1969.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'DMF' or similar initials, written in a cursive style.

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Attorney Docket No. 79-02

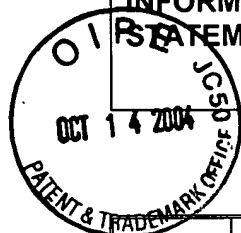
October 14, 2004

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number	<b>10/734,609</b>
Filing Date	<b>December 12, 2003</b>
First Named Inventor	<b>Smith et al.</b>
Art Unit	<b>1648</b>
Examiner Name	<b>Michael M. McGraw</b>
Attorney Docket Number	<b>79-02</b>

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**U.S. PATENT DOCUMENTS**

Examiner Initial*	Cite No. <sup>1</sup>	Document Number (US-)	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No. <sup>1</sup>	Foreign Patent Document Number (include WIPO country code )	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)	T <sup>2</sup>
	1	WO 92/10578	06/25/1992			
	2	WO 99/08706	02/25/1999			

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initial*	Cite No. <sup>1</sup>	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	Balasuriya et al. (Feb. 2002) "Alphavirus replicon particles expressing the two major envelope proteins of equine arteritis virus induce high level protection against challenge with virulent virus in vaccinated horses"; <i>Vaccine</i> 20:1609-1617.	
	2	Bell et al. (Mar. 1978) "Effect of Low-NaCl Medium on the Envelope Glycoproteins of Sindbis Virus"; <i>J. Virol.</i> 25(3):764-769	
	3	Bernard et al. (2000) "Mutations in the E2 Glycoprotein of Venezuelan Equine Encephalitis Virus Confer Heparan Sulfate Interaction, Low Morbidity, and Rapid Clearance from Blood of Mice," <i>Virology</i> 276:93-103	
	4	Casimiro et al. (Jan. 2002) "Vaccine-induced immune responses in rodents and nonhuman primates by use of a humanized immunodeficiency virus type 1 pol gene"; <i>J. Virol.</i> 76:185-195	
	5	Davies et al. (1991), "Attenuating Mutations in the E2 Glycoprotein Gene of Venezuelan Equine Encephalitis Virus: Construction of Single and Multiple Mutants in a Full-Length cDNA Clone," <i>Virology</i> 183:20-31	
	6	Davies et al. (1986) "A Single Nucleotide Change in the E2 Glycoprotein Gene of Sindbis Virus Affects Penetration Rate in Cell Culture and Virulence in Neonatal Mice," <i>Proc. Natl. Acad. Sci. USA</i> 83:6771-6775	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).

<sup>2</sup>Applicant is to place a check mark here or "x" if English language Translation is attached.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	Substitute for form 1449/PTO, based on PTO/SB/08A and 08B	Application Number	10/734,609
		Filing Date	December 12, 2003
		First Named Inventor	Smith et al.
		Art Unit	1648
		Examiner Name	Michael M. McGraw
		Attorney Docket Number	79-02

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7	Frolov et al. (1996) "Alphavirus-based expression vectors: Strategies and applications"; <i>Proc. Natl. Acad. Sci. USA</i> <b>93</b> :11371-11377	
8	Geisbert et al. (May 2002) "Evaluation in Nonhuman Primates of Vaccines against Ebola Virus"; <i>Emerging Infect. Dis.</i> <b>8</b> (5):503-507	
9	Golzio et al. (June 2002) "Cell Synchronization Effect on Mammalian Cell Permeabilization and Gene Delivery by Electronic Field," <i>Biochim. Biophys. Acta</i> <b>1563</b> :23-28	
10	Hahn et al. (1992) "Infectious Sindbis Virus Transient Expression Vectors for Studying Antigen Processing and Presentation," <i>Proc. Natl. Acad. Sci. USA</i> <b>89</b> :2679-2683	
11	Heiser et al. (Feb. 2002) "Autologous dendritic cells transfected with prostate-specific antigen RNA stimulate CTL responses against metastatic prostate tumors," <i>J. Clin. Inv.</i> <b>109</b> (3):409-417	
12	Hevey et al. (1998) "Marburg Virus Vaccines Based upon Alphavirus Replicons Protect Guinea Pigs and Nonhuman Primates"; <i>Virology</i> <b>251</b> :28-37	
13	Hill et al., (1997) "RNA-RNA recombination in Sindbis virus: roles of the 3' conserved motif, poly(A) tail, and nonviral sequences of template RNAs in polymerase recognition and template switching," <i>J. Virol.</i> <b>71</b> :2693-2704	
14	Johnston et al., (1988) "Selection for Accelerated Penetration in Cell Culture Coselects for Attenuated Mutants of Venezuelan Equine Encephalitis Virus," <i>Virology</i> <b>162</b> :437-443	
15	Kinney et al. (1989) "The Full Length Nucleotide Sequences of the Virulent Trinidad Donkey Strain of Venezuelan Equine Encephalitis Virus and Its Attenuated Vaccine Derivative, Strain TC-83," <i>Virology</i> <b>170</b> :19-30	
16	Klimstra et al., (1998) "Adaptation of Sindbis Virus to BHK Cells Selects for Use of Heparan Sulfate as an Attachment Receptor," <i>J. Virol</i> <b>72</b> :7357-7366	
17	Koller et al. (Sept. 2001) "A high-throughput alphavirus-based expression cloning system for mammalian cells"; <i>Nature Biotech.</i> <b>19</b> :851-855	
18	Kumamoto et al. (Jan. 2002) "Induction of Tumor-Specific Protective Immunity by <i>in situ</i> Langerhans Cell Vaccine," <i>Nature Biotech.</i> <b>20</b> :64-69	
19	Liljestrom et al. (1991) "In Vitro Mutagenesis of a Full-Length cDNA Clone of Semliki Forest Virus: The Small 6,000-Molecular-Weight Membrane Protein Modulates Virus Release," <i>J. Virol.</i> <b>65</b> :4107-4113	
20	Lu et al., (Jan. 2001) "Transmission of Replication-Defective Sindbis Helper Vectors Encoding Capsid and Envelope Proteins," <i>J. Virol. Methods</i> <b>91</b> (1):59-65	
21	Olmsted et al. (1986) "Characterization of Sindbis Virus Epitopes Important for Penetration in Cell Culture and Pathogenesis in Animals," <i>Virology</i> <b>148</b> :245-254	
22	Pushko et al. (1997) "Replicon-Helper systems from Attenuated Venezuelan Equine Encephalitis Virus: Expression of Heterologous Genes <i>in Vitro</i> and Immunization against Heterologous Pathogens <i>in Vivo</i> "; <i>Virology</i> <b>239</b> :389-401	
23	Waite et al. (Jan. 1970) "Inhibition of Sindbis Virus Production by Media of Low Ionic Strength: Intracellular Events and Requirements for Reversal"; <i>J. Virol.</i> <b>5</b> :60-71.	
24	Ward et al. (Jun. 2002) "Immunotherapeutic Potential of Whole Tumor Cells," <i>Cancer Immunol. Immunother.</i> <b>51</b> :351-357.	

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	25	Wilson et al. (Jul. 2001) "Vaccine Potential of Ebola Virus VP24, VP30, VP35, and VP40 Proteins"; <i>Virology</i> <b>286</b> :384-390	
	26	Yamanaka et al. (Sept. 2002) Marked enhancement of antitumor immune responses in mouse brain tumor models by genetically modified dendritic cells producing Semliki Forest virus-mediated interleukin-12"; <i>J. Neurosurg.</i> <b>97</b> :611-618.	
	27	Yamanaka et al. (Mar. 2001) "Enhancement of antitumor immune response in glioma models in mice by genetically modified dendritic cells pulsed with Semliki Forest virus-mediated complementary DNA"; <i>J. Neurosurg.</i> <b>94</b> :474-481.	
	28	Ying et al. (1999) "Cancer Therapy Using a Self-Replicating RNA Vaccine," <i>Nature Medicine</i> <b>5</b> (7):823-827	

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